

**U.S. Bureau of Land Management  
Arizona Strip Field Office**

**ENVIRONMENTAL ASSESSMENT  
Rock Canyon Pipeline Extensions  
AZ-EA-110-2005-0031**

**INTRODUCTION**

The Arizona Strip Field Office of the Bureau of Land Management (BLM) and the grazing permittee are working cooperatively to improve grazing management and rangeland health within the Rock Canyon Tank Allotment. An allotment management plan is in effect which identifies the need for reliable water to improve grazing management. In furtherance of cooperative resource conservation, enhancement and management objectives, construction of the Rock Canyon Pipeline Extensions is proposed on the Rock Canyon Tank Allotment.

**PURPOSE AND NEED**

The purpose of the planned Rock Canyon Pipeline Extensions is to allow better livestock distribution on the north and west sides of the Rock Canyon Tank Allotment. By installing 3 additional water troughs--facilitated by the pipeline extensions—and alternating their use, better livestock distribution would result and utilization levels could be reduced near the other existing water facilities.

**Conformance with Land Use Plan**

The proposed action and alternative described below are in conformance with the Arizona Strip District Resource Management Plan (RMP) dated January 31, 1992, as amended April 1997, and are consistent with Federal, State and local laws, regulations, and plans. Rangeland management was considered in the Vermillion Grazing EIS of 1979, which was subsequently adopted as management direction in the Arizona Strip District RMP of 1992 (I-1). The Vermillion Grazing EIS states: Additional water sources are needed to provide dependable livestock water in all pastures. . . . pipelines [are needed] to provide a source of water to improve livestock distribution on areas where water is presently limited (1-18).

RMP decisions applicable to this proposed action include:

GZ01 Manage rangeland in accordance with multiple-use objectives, requirements and provisions of established laws, regulation and BLM policies, and the Vermillion Grazing Environmental Impact Statement and Allotment Management Plans, which specify grazing systems, management facilities and land treatments.

GZ06 Continue implementing the Vermillion grazing management program as described in the Grazing Environmental Impact Statement that specifies grazing systems, management facilities and land treatments, provided they are consistent with other Resource Management Plan Decisions.

TE02 Prior to potentially disturbing activities or surface disturbing activities on public land, a special status species review will be conducted by a qualified specialist.

S/V A1 Surface disturbing activities on public land would be reviewed for cultural values by a cultural resource specialist.

### **Relationship to Statutes, Regulations, Other Plans and BLM Guidance**

This proposal is in conformance with Arizona's Standards and Guides, which were developed through a collaborative process involving the Arizona Resource Advisory Council and the Bureau of Land Management State Standards and Guides Team. The Secretary of the Interior approved the Standards and Guides in April 1997. The Decision Record, signed by the BLM State Director (April 1997) provided for full implementation of the Standards and Guides in all Arizona Land Use Plans.

## **PROPOSED ACTION AND ALTERNATIVE**

### **Proposed Action**

At T. 40 N., R. 3 W., sec. 36; and T. 39 N., R. 3 W., secs. 1, 14, & 15 install 2 pipeline extension segments and connect them to existing pipelines. These pipeline extensions would be of 1¼ inch polyethylene or PVC composition, approximately 3 miles in cumulative length, and would be buried to a depth of ~18 inches either by ripping or trenching. Three drinking troughs would be installed at the pipelines along with inline float boxes to control the water level at the drinking troughs. (see map at the end of this document for details on the project layout). It is estimated the disturbance associated with the project would be less than 7 acres in area. The grazing permittee and Arizona Strip Grazing Board would fund the project, with the grazing permittee providing necessary labor to complete the project.

Mitigation for the project would include: excavate only to the extent necessary to install the pipelines and troughs, remove all construction debris from the site, and equip the drinking troughs with wildlife escape ramps.

The proposed action includes future maintenance activities and any necessary reconstruction for the life of the project which is expected to be at least 50 years. The exact maintenance requirements are not known but are expected to include minor repairs to pipes and troughs.

### **No-Action Alternative**

Under the no-action alternative, the pipeline extensions would not be installed on BLM administered lands.

## **AFFECTED ENVIRONMENT**

The affected environment is tiered to the Arizona Strip District RMP (January 31, 1992), Affected

Environment pages III-1 to III-58, and pages 2-1 to 2-47 of the Vermillion Grazing EIS (1979) which was adopted into the RMP and are essentially the same for this action. Chapter 2 of the Vermillion Grazing EIS describes the environmental components likely to be impacted by the proposed action. Environmental components discussed in the EIS that might affect or be affected by the proposal are: Vegetation, Soils, Water Resources, Animals (wildlife), Special Status Species, Cultural Resources, Visual Resources, and Land Uses including livestock grazing and recreation.

### **Location and General Setting**

The Rock Canyon Tank Allotment is located on the Arizona Strip in Coconino County, Arizona approximately 8 miles south of Fredonia, Arizona on the east and west sides of the Ryan Road. The land pattern in the area involved includes both BLM-administered public land and state land controlled by the grazing permittee.

The following critical elements of the human environment are not present or are not affected by the proposed action or alternatives in this EA:

- Prime or unique farmlands
- Flood plains
- Environmental Justice
- Native American Religious Concerns
- Wastes (hazardous or solid)
- Wetland Riparian Zones
- Wild and Scenic Rivers
- Areas of Critical Environmental Concern
- Wilderness

### **Elements-Brought Forward for Consideration**

- Soil and Air
- Vegetation
- Wildlife
- Threatened and Endangered Species
- Cultural Resources
- Visual Resources
- Recreation

Soil and Air: Soils are mostly shallow loamy, derived typically from limestone parent material. Air quality within the general area is good, though wind blown dust and smog from urban areas are considered minor sources of pollution. The Arizona Strip District is managed under Class II Ambient Air Quality Standards (prevent substantial decreases in air quality).

Vegetation: Terrain consists of rolling hills, open brushy flats, and drainage bottoms; vegetated by some pinyon and juniper, sagebrush, cliffrose, ephedra, blue grama, galleta, and various annual

and perennial forbs. Desirable deer browse on the sagebrush slopes includes cliffrose, and isolated patches of fourwing saltbush. Currently, no known noxious weeds occur within the proposed project area.

Wildlife: Mammals typical of the area include mule deer, coyote, bobcat, mountain lion, jackrabbit, cottontail rabbit, ground squirrel, and various rodents. Common avian species include sparrows, jays, woodpeckers, ravens, and various raptors such as red tailed hawks and golden eagles. Reptiles include western rattlesnakes, gopher snakes and various lizard species.

Threatened or Endangered Species: Bald eagle, a threatened species may occasionally flyover this area during the winter. The species is not known to nest in this area and typically migrates northward in the Spring. The nearest winter roost is approximately 30 miles north at Shiprock near Fredonia, Arizona. There have been no recorded observations of bald eagles on the Rock Canyon Allotment.

An experimental non-essential (10J) population of California condors was released at the Vermilion Cliffs, some 35 miles northeast, in 1996. Condors may occasionally fly over or forage over this area, but no observations of the species have been recorded on this allotment.

There are no known threatened or endangered plant species known from the area of the proposed action.

Cultural Resources: The area has a representation of a wide range of cultural diversity in its archaeological resources from 11,000 years ago to present. Known Paleo-Indian, Archaic, Anasazi, Paiute, and Historic Cultural manifestations have been reported throughout the region.

Visual Resources: The area involved is classified by BLM as a class 4 visual resource management (VRM) zone. The class 4 VRM has scenic quality which is categorized as fairly mundane and change may be in contrast to the landscape.

Recreation: Primary activities that occur in the area are hunting, camping, and back country touring (sightseeing by vehicle). Off-highway vehicle travel in the area is limited to existing roads and trails. The Recreational Opportunity Spectrum System used by BLM describes the area as semi-primitive, motorized activities.

## **ENVIRONMENTAL CONSEQUENCES**

### **Impacts of the Proposed Action**

Soil and Air: Excavation would be limited to what is necessary to install the pipelines and troughs, but would result in some degree of soil disturbance and compaction. The pipeline extensions and troughs would allow better livestock distribution on the north and west sides of the Rock Canyon Tank Allotment, reducing impacts of concentrated livestock use.

No impacts to air quality are expected except for a temporary increase in dust from the vehicular and construction activity associated with the project.

Vegetation: Installation of the proposed pipeline extensions and troughs would cause damage to some species of vegetation. Impacts would occur as a result of vehicular activity in delivering materials and excavation. The area of impact is estimated to be 7 acres. It is unlikely the proposed project would propagate the spread of noxious weeds, as no known noxious weeds occur within the area.

Overall, the proposed action would benefit vegetative resources in the long term by facilitating improved control of livestock distribution and use, resulting in additional grazing deferments within the north and west portions of the Rock Canyon Tank Allotment. Regular deferment from grazing would improve health, reproduction, and vigor of range plants; plant diversity; ecosystem function; and productivity.

Wildlife: Preparation for installation of the pipelines and troughs would involve surface disturbance and the clearing of some brush which would disturb or alter wildlife habitat in that area. A few animals with low mobility, such as snakes, lizards, and small mammals, may be injured or killed. More mobile species, such as birds and larger mammals would be disturbed and/or displaced to adjacent habitats. The proposed action would also have the impact of creating dust and noise, temporarily disturbing wildlife in the area.

The new facility would change livestock distribution and vegetation utilization and improve the long-term ecosystem health within the area involved. Anticipated improvement of the rangeland health would be beneficial to most forms of wildlife over the long run. Any disturbance associated with construction would be offset by the availability of additional water for wildlife.

Threatened or Endangered Species: The proposed action would have no affect on any threatened or endangered species. No observations of bald eagles or California condor have been recorded for this area. The project does not include any design features that would promote increased use of the area by either species.

Cultural Resources: A Class 3 cultural survey was completed and no cultural resources were found in the area of the proposed project work.

Visual Resources: The proposed Rock Canyon Pipeline Extensions are within a class 4 VRM zone, involving scenic quality which is categorized as fairly mundane. Impact on visual quality would be slight, as the pipelines and troughs would be visible only in the vicinity of the project.

Recreation: No impact to recreation users is anticipated. Added water facilitated by the pipelines and troughs may enhance hunting and wildlife viewing opportunities for recreationists.

### **Impacts of No Action**

Soil and Air: No impact to soil or air would result from this alternative.

Vegetation: The no-action alternative would eliminate the vegetation disturbance associated with installing the new pipelines and troughs but would also limit options for better livestock control, which would be most beneficial to the vegetative resources.

Wildlife: This alternative would alleviate possible disturbance to wildlife associated with installation of new pipelines and troughs, but would preclude availability of additional water.

Threatened or Endangered Species: Implementation of this alternative would have no affect on any threatened or endangered species.

Cultural Resources: No impacts on cultural resources would result because of this alternative.

Visual Resources: No adverse impacts on visual resources have been identified.

Recreation: No additional impacts on recreation users would result because of this alternative.

## **CUMULATIVE IMPACTS**

Proposed Action: Facilities associated with livestock grazing have been present on the Arizona Strip for over 100 years. Cumulative impacts of the proposed pipelines and troughs would be insignificant because of the small scale of the project in relation to all the other facilities developed over the years. In the future additional water developments might be proposed for other allotments in order to resolve utilization and livestock distribution problems. For a more complete analysis of cumulative impacts from actions proposed to occur on public lands on the Arizona Strip, refer to the Arizona Strip District Resource Management Plan and Final EIS (1990 pp. III-33 to III-36).

No-Action Alternative: This alternative would eliminate the minor soil and vegetation disturbance associated with installing the pipelines and troughs, but would limit accomplishment of the objectives and associated improvements in rangeland health and ability to provide additional water for livestock and wildlife.

## **CONSULTATION AND COORDINATION**

This document underwent internal review (Arizona Strip Field Office). The BLM specialists conducting this review were:

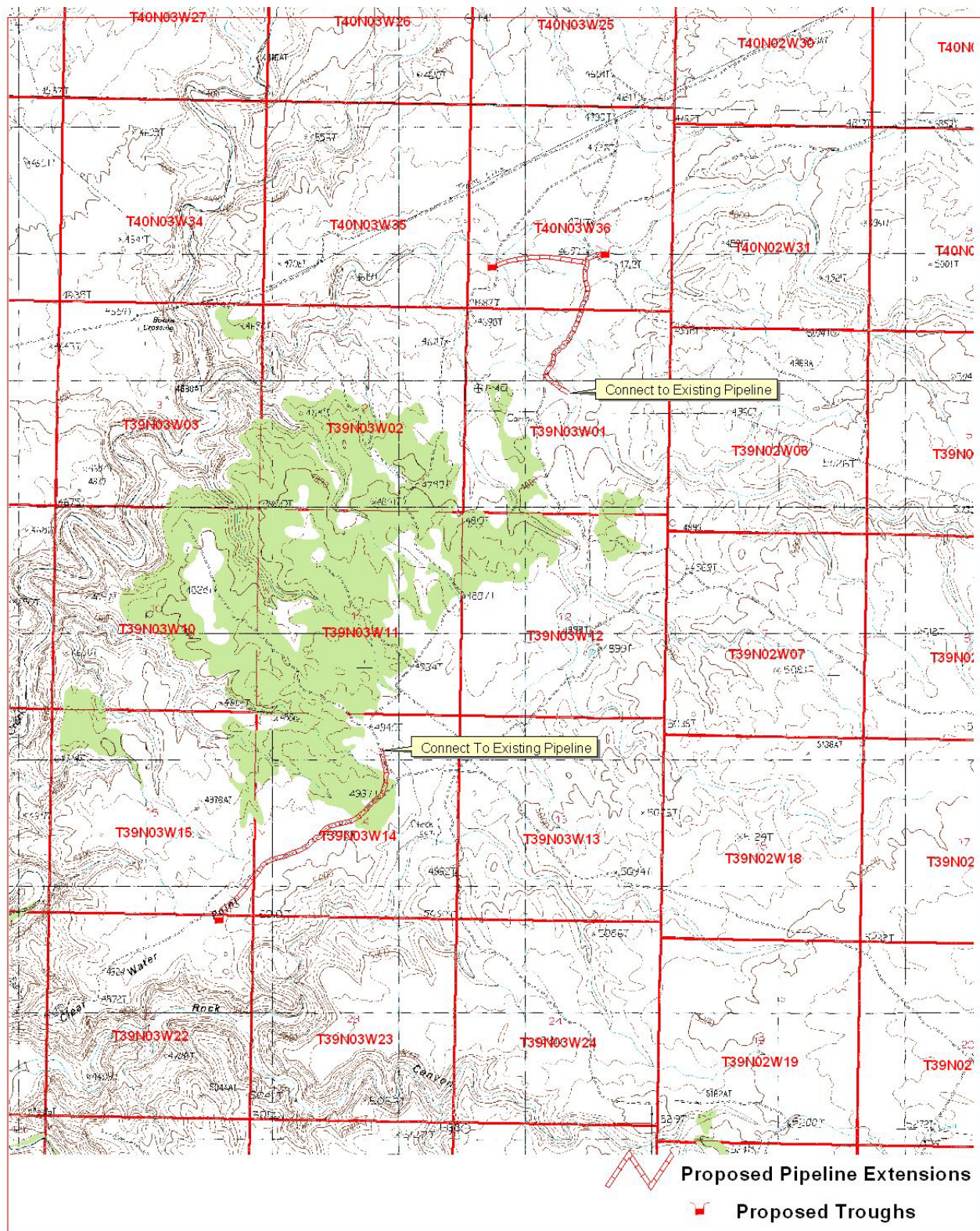
Gloria Benson, Native American Coordinator  
Larry Gearhart, Recreation  
Laurie Ford, Lands/Realty/Minerals  
Michael Herder, Wildlife  
John Herron, Cultural  
Lee Hughes, Plants  
Ray Klein, GCPNM Supervisory Ranger

Linda Price, S&G  
Bob Sandberg, Range  
Richard Spotts, Environmental Coordinator  
Ron Wadsworth, Supervisory Law Enforcement

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Signature of P & E C







## DECISION RECORD/FINDING OF NO SIGNIFICANT IMPACT

It is my decision to authorize the proposed action, analyzed in the Environmental Assessment AZ-110-2005-0031, to install 2 pipeline extensions and 3 water troughs. In conjunction with this a no action alternative was also analyzed. The proposed action was selected in deference to the no action alternative because reliable water would be provided for livestock and wildlife use and better livestock distribution would result on the allotment.

Mitigation for the project includes: excavate only to the extent necessary to install the pipeline extensions and water troughs, remove all construction debris from the site, and equip the drinking troughs with wildlife escape ramps.

In addition, any sub-surface archaeological, historical, or paleontological remains discovered during use shall be left intact; all work in the area shall stop immediately and the area manager shall be notified immediately. Recommencement of work shall be allowed upon clearance by the area manager in consultation with the archaeologist. An additional archaeological survey shall be required in the event the proposed project location is changed, or additional surface disturbing activities are added to the project after the initial survey. Any such survey would have to be completed prior to commencement of the project.

BLM monitors for noxious weeds and eradicates them as they are found. To avoid the spread of noxious weed seed, excavating equipment should be power washed prior to entering the project area.

Based on the analysis of Environmental Assessment AZ-110-2005-0031, I have determined that the Rock Canyon Pipeline Extensions will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared.

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Field Manager, Arizona Strip Field Office

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Date